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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,560	09/26/2003	Toshifumi Takahira	117346	8131

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OLIFF & BERRIDGE, PLC
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ALEXANDRIA, VA 22320

EXAMINER

SINGH, SATWANT K

ART UNIT	PAPER NUMBER
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2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/670,560

Applicant(s)

TAKAHIRA ET AL.

Examiner

Satwant K. Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/26/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Muramoto (US 7,006,691).
3. Regarding Claim 1, Muramoto discloses a data processing system comprising: a first data process device for subjecting first data to a first process based on process data, to obtain second data (Fig. 1, RIP 21) (RIP converts page data into image data) (col. 5, lines 24-33); a second data process device for subjecting the second data to a second process (Fig. 1, color conversion section 22) (color conversion section applies color conversion to image data obtained by RIP) (col. 5, lines 34-38); and a data providing device for providing the process data (data is received by the RIP), wherein: the first data process device includes: a process unit for performing the first process to change the first data on the basis of the process data so that a desired result is obtained by the second process (RIP converts the page data into image data) (col. 5, lines 24-33); and a data acquiring unit for acquiring the process data from the data providing device (color conversion section 22) (col. 5, lines 34-38).

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4. Regarding Claim 2, Muramoto discloses a data processing system, wherein: the first data is first image data (RIP receives as the image data, the page data describing a page structure of the color image) (col. 5, lines 24-33); the second data is second image data (color conversion applies color conversion to the image data obtained by RIP for each pixel to obtain image data representation) (col. 5, lines 34-38); the second data process device outputs an output image on the basis of the second image data, as the second process (image data representative of a color of an image with a CMYK color space) (col. 5, lines 34-38); the process data contains first relational data indicating a relation between an output image obtained from image data by the second process and the image data (RGB color space into CMYK color space); and the first process is a process of converting the first data into the second data on the basis of the first relational data, so that the second process outputs a desired output image (applying color conversion to obtain image data representative of a color of an image with a color space with which the image output apparatus is associated) (col. 5, lines 24-38).

5. Regarding Claim 3, Muramoto discloses a data processing system, wherein: the first data process device further includes a first image outputting unit (page data converted into image data); the process data further contains second relational data indicating a relation between an output image by the first image outputting unit and the output image by the second data process device (RGB color space into CMYK color space); and the process unit for converting the first data into third data on the basis of the second relational data so that an output image based on the third data by the second data process device is identical to an output image on the basis of the first data

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by the first image outputting unit (converting CMYK data obtained by color conversion section into halftone dot data) (col. 5, lines 24-42).

6. Regarding Claim 4, Muramoto discloses a data processing system, wherein the second relational data are generated on the basis of the first relational data and third relational data indicating a relation between an output image obtained from image data by the first image outputting unit and the image data (RGB color space into CMYK color space) (col. 5, lines 24-42).

7. Regarding Claim 5, Muramoto discloses a data processing system, wherein at least one of first data process device, the second data process device, and the data providing device includes a relational data generating unit for generating the second relational data (color conversion section 22) (col. 5, lines 24-38).

8. Regarding Claim 6, Muramoto discloses a data processing system, wherein: the second data process device is a plurality of second data process devices (plurality of post stages 41c and 42c) (col. 6, lines 37-52); the data providing device includes: a relational data storing unit for receiving and storing the first relational data from each of second process devices (ICC profile 40) (col. 5, lines 63-66, col. 6, lines 1-4); and a data providing unit for providing the relational data generating unit with the process data containing the stored first relational data (coordinate conversion between the color spaces) (col. 6, lines 53-58); and the first process device includes the relational data generating unit (ICC profile incorporated into color conversion section) (col. 5, lines 53-59).

9. Regarding Claim 7, Muramoto discloses a data processing system, wherein: the first data process device is a plurality of first data process devices (plurality of pre-stages 41a and 42a) (col. 6, lines 37-52); at least one of the first process devices includes the relational data generating unit (ICC profile incorporated into color conversion section) (col. 5, lines 53-59); and the other of the first process devices request the at least one of the first process devices including the relational data generating unit, to generate the second relational data (color conversion between color space) (col. 6, lines 5-11).

10. Regarding Claim 8, Muramoto discloses a data processing system, wherein: the first data process device is a plurality of first data process devices (plurality of pre-stages 41a and 42a) (col. 6, lines 37-52); the second data process device is a plurality of second data process devices (plurality of post stages 41c and 42c) (col. 6, lines 37-52); the data providing device includes: a relational data storing unit for receiving and storing the third relational data from each of first process devices and for receiving and storing the first relational data from each of second process devices (ICC profile 40) (col. 5, lines 63-66, col. 6, lines 1-4); and a data providing unit for performing at least one of: providing the second process device with the process data containing the stored third relational data (converting CMYK data obtained by color conversion section into halftone dot data) (col. 5, lines 24-42), and providing the first process device with the process data containing the stored first relational data (RGB color space into CMYK color space) (col. 5, lines 24-33).

11. Regarding Claim 9, Muramoto discloses a data processing system, wherein: the first data process device is a plurality of first data process devices (plurality of pre-stages 41a and 42a) (col. 6, lines 37-52); a part of the first data process devices include the first outputting units (LUTs, 41a, 42a); a part of the second data process devices include second image outputting units (LUTs, 41c, 42c); the second relational data indicates a relation between the output image by a particular first image outputting unit and an output image by a particular second image outputting unit (device link profiles coupled to one another on a functional basis) (col. 5, lines 63-66, col. 6, lines 1-4) ; the relational data generating unit generates the second relational data corresponding to each combination of the first image outputting units and the second data outputting units, on the basis of the stored first relational data and the stored third relational data (ICC profiles define a coordinate conversion between a color space) (col. 6, lines 25-36).

12. Regarding Claim 10, Muramoto discloses a data processing system, wherein the data providing device receives and stores the first relational data corresponding to the second relational data of a higher using frequency than a predetermined reference, from each the second process device (profile correction apparatus corrects change with elapse after the initial regulation) (col. 8, lines 35-37).

13. Regarding Claim 11, Muramoto discloses a data processing system, wherein at least one of the first relational data, the second relational data, and the third relational data is automatically updated at a predetermined timing (profile correction apparatus corrects change with elapse after the initial regulation) (col. 8, lines 35-37).

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14. Regarding Claim 12, Muramoto discloses a data processing device for subjecting first data to a first process based on processing data provided from a data providing device, to obtain second data (RGB color space into CMYK color space) (col. 5, lines 24-42), the data processing device comprising: a process unit for performing the first process to change the first data on the basis of the process data so that a desired result is obtained by a second process, which is applied to the second data (Fig. 1, RIP 21) (RIP converts page data into image data) (col. 5, lines 24-33); and a data acquiring unit for acquiring the process data from the data providing device (input apparatus 51) (col. 5, lines 66-67, col. 6, lines 1-4).

15. Regarding Claim 13, Muramoto discloses a data process device, wherein: the first data is first image data (RIP receives as the image data, the page data describing a page structure of the color image) (col. 5, lines 24-33); the second data is second image data (color conversion applies color conversion to the image data obtained by RIP for each pixel to obtain image data representation) (col. 5, lines 34-38); the second process is a process of outputting an output image on the basis of the second image data (image data representative of a color of an image with a CMYK color space) (col. 5, lines 34-38); the process data contains first relational data indicating a relation between an output image obtained from image data by the second process and the image data (RGB color space into CMYK color space); and the first process is a process of converting the first data into the second data on the basis of the first relational data, so that the second process outputs a desired output image (applying color conversion to

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obtain image data representative of a color of an image with a color space with which the image output apparatus is associated) (col. 5, lines 24-38).

16. Regarding Claim 14, Muramoto discloses a data process method comprising: providing process data acquiring the process data (image data processing apparatus receives image data) (col. 5, lines 8-19); subjecting first data to a first process based on the processing data, to obtain second data (RIP converts page data into image data) (col. 5, lines 24-33); and subjecting the second data to a second process, wherein: the first process changes the first data on the basis of the process data so that a desired result is obtained by the second process (color conversion applies color conversion to the image data obtained by RIP for each pixel to obtain image data representation) (col. 5, lines 34-38).

17. Regarding Claim 15, Muramoto discloses a data process method, wherein: the first data is first image data (RIP receives as the image data, the page data describing a page structure of the color image) (col. 5, lines 24-33); the second data is second image data (color conversion applies color conversion to the image data obtained by RIP for each pixel to obtain image data representation) (col. 5, lines 34-38); the second process is a process of outputting an output image on the basis of the second image data (image data representative of a color of an image with a CMYK color space) (col. 5, lines 34-38); the process data contains first relational data indicating a relation between an output image obtained from image data by the second process and the image data (RGB color space into CMYK color space); and the first process is a process of converting the first data into the second data on the basis of the first relational data, so

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that the second process outputs a desired output image (applying color conversion to obtain image data representative of a color of an image with a color space with which the image output apparatus is associated) (col. 5, lines 24-38).

18. Claims 16-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Usui (US 6,629,753).

19. Regarding Claim 16, Usui discloses an image processing method comprising: generating first profile data indicating a relation between a first output image obtained from first image data by a first printer and the first image data (Fig. 1, one of plurality of printers 21) (color conversion tables created for each of the plural printers) (col. 7, lines 30-43); generating a second profile data indicating a relation between a second output image obtained from second image data by a second printer and the second image data (Fig. 1, one of plurality of printers 21) (color conversion tables created for each of the plural printers) (col. 7, lines 30-43) ; acquiring the generated first profile data and the generated second profile data at a predetermined timing (management unit obtains time at which each printer can start printing) (col. 8, lines 65-67, col. 9, lines 1-13); generating link data indicating between the first output image and an output image obtained from the first image data by the second printer, on the basis of the acquired first profile data and the acquired second profile data (converting printing data to data suitable for printing carried out on each printer based on conversion tables) (col. 7, lines 31-43); and image-processing image data on the basis of the link data so that an output image, which is printed by the first printer from the image data, is substantially identical to an output image, which is printed by the second printer from the image data (printing

of common electronic printing data on each individual printer becomes identical in color) (col. 7, lines 53-60).

20. Regarding Claim 17, Usui discloses an image processing method, wherein: at least one of the generated first profile data and the generated second profile data are acquired and updated when the link data are generated (management unit sends stations converted data) (col. 7, lines 61-67); and the link data is generated on the basis of the last updated first profile data and the last updated second profile data (conversion tables updated with the history of each printer if necessary) (col. 8, lines 61-64).

21. Regarding Claim 18, Usui discloses an image processing method, wherein: at least one of a plurality of computers makes the other computers perform the generation of the link data (Fig. 1, plurality of stations each comprising terminals 23 and printer 21) (each terminal installed in station 20 is in the form of a computer) (col. 10, lines-51-53); the at least one of the computers performs the image processing based on the generated link data (print specifications of printing data) (col. 10, lines 54-60); and the first printer receives the processed image data from the at least one of the computers to print the received image data (printers carry out printing of the converted printing data) (col. 10, 30-36).

22. Regarding Claim 19, Usui discloses an image processing method, wherein: the second printer is connected with a computer (Fig. 1, plurality of stations each comprising terminals 23 and printer 21); the computer connected with the second printer performs the generation of the link data (printers carry out printing of the converted printing data) (col. 10, lines 30-36); and the computer performs the image processing on

the basis of the generated link data (print specifications of printing data) (col. 10, lines 54-60).

23. Regarding Claim 20, Usui discloses an image processing method, wherein a predetermined server computer (management unit in the form of a server) acquires the first profile data and the second profile data, periodically and automatically (management unit is communicably connected to each station 20) (col. 7, lines 26-43).

24. Regarding Claim 21, Usui discloses an image processing method, wherein a predetermined server computer acquires the first profile data and the second profile data each time a change occurs (management unit corrects color conversion tables) (col. 10, lines 61-67, col. 11, lines 1-9).

25. Regarding Claim 22, Usui discloses an image processing method, wherein: the second printer prints image data transmitted from a computer (Fig. 1, plurality of stations each comprising terminals 23 and printer 21), which is connected with the first printer (print job allocated to one or more printers) (col. 9, lines 19-33); and a predetermined server computer acquires the second profile data (printing specification at of printing of printing data) (col. 8, lines 1-7).

26. Regarding Claim 23, Usui discloses an image processing method, further comprising: storing the first profile data by a first computer connected with the first printer (one color conversion table is created for each of plural printers 21) (col. 7, lines 53-60); storing the second profile data by a second computer connected with the second printer (one color conversion table is created for each of plural printers 21) (col. 7, lines 53-60); counting at least one of use frequency of the generated link data and

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number of uses of the generated link data (printer 21 continuously prints identical print data) (col. 8, lines 58-64); and acquiring at least one of the first profile data and the second profile data corresponding to the link data, which has at least one of the use frequency and the number of uses higher than a predetermined reference value is from at least one of the first and second computers by a server computer (management unit corrects color conversion table in accordance with the history information of each printer) (col. 8, lines 58-64).

27. Regarding Claim 24, Usui discloses an image processing method, wherein the server computer generates the link data on the basis of the acquired second profile data and the first profile data of the first printer connected with the first computer, which causes the second printer to print the image data (management unit allocates the printing job to one or more printers in stations 20 other than order receiving station 20a) (col. 9, lines 19-34).

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sugizaki (US 6,975,431) discloses an image processing method of performing a process for converting image data.

Kakutani (US 7,046,844) discloses converting image data of a first color coordinate system to image data of a second color coordinate system using a color conversion module.

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Nagatsuka (US 7,127,097) discloses an image processing apparatus for converting a first image data inputted into the image apparatus to a second image data used in a visible image outputting apparatus.

Engbrocks (US 7,177,046) discloses a method for producing and outputting at least one printed page containing several blocks is using a first program module.

Yada (US 7,193,732) discloses a command data conversion device and printing apparatus that can correctly interpret print command data.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (571) 272-7468. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



sks

Satwant K. Singh
Examiner
Art Unit 2625



DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600